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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,296	07/14/2003	Wing Lee	IDF 2398 4000-12500	6314
28003	7590	08/19/2009	EXAMINER	
SPRINT			WINTER, JOHN M	
6391 SPRINT PARKWAY			ART UNIT	
KSOPHT0101-Z2100			PAPER NUMBER	
OVERLAND PARK, KS 66251-2100			3685	
			MAIL DATE	DELIVERY MODE
			08/19/2009	PAPER

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/619,296
Filing Date: July 14, 2003
Appellant(s): LEE, WING

Micheal Piper
Reg # 39,800
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed April 16, 2009 appealing from the Office action mailed January 16, 2009.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

- | | | |
|--------------------|----------------------|---------|
| 1. Suarez | US Patent 5,790,789 | 08/1998 |
| 2. Hejlsberg et al | US Patent 7,165,239 | 07/2001 |
| 3. Bownman-Amuah | US Patent 6,742,015) | 08/1999 |

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 43-78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suarez (US Patent 5,790,789) in view of Hejlsberg et al (US Patent 7,165,239), and further in view of Bownman-Amuah (US Patent 6,742,015).

5.

6. As per claim 43

Suarez ('789) discloses a system for making computing applications throughout an enterprise aware of business events, comprising:

defining objects in an enterprise object model that model data and services provided by back-office systems; (Column 12 lines 37-64)

brokering interactions, by an enterprise integration layer, between the back office systems that provide data and services and front-office systems that use the enterprise integration layer to access the data and the services provided by the back office-systems through the interactions, (Figure 11; Discussion of communication between processes at column 9, line 53)

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brokering the interactions comprising: receiving, from the front-office systems, accesses to objects of the enterprise object model in the enterprise integration layer through client access interfaces of the enterprise integration layer, wherein each of the client access interfaces corresponds with a different technology and provides a standardized interface through which the front-office systems access the objects of the enterprise object model; (Column 9, lines 14-39)

implementing, with a business object server of the enterprise integration layer coupled to the client access interfaces, data functions and service methods associated with the accessed objects that enable the interactions between the front-office systems and back-office systems; (Column 11, lines 15-43; column 34 lines 52-67 -- Applicant(s) are reminded that optional or conditional elements do not narrow the claims because they can always be omitted. See e.g. MPEP §2106 II C: "Language that suggest or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation. [Emphasis in original.] " As a matter of linguistic precision, optional elements do not narrow the claim because they can always be omitted.)

Suarez ('789) does not explicitly disclose transforming, with a set of adapters of the enterprise integration layer coupled to the business object server, the accessed objects into a format of the back-office systems corresponding with the implementation of the data functions and the service methods associated with the accessed objects; Hejlsberg et al. ('239) discloses transforming, with a set of adapters of the enterprise integration layer coupled to the business object server, the accessed objects into a format of the back-

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office systems corresponding with the implementation of the data functions and the service methods associated with the accessed objects;(Column 5, line 60 – column 6 line 44) It would be obvious to one having ordinary skill in the art at the time of the invention to combine Suarez ('789)'s method with Hejlsberg et al. ('239)'s teaching in order allow distributed processes to be deployed over non-homogenous networks; furthermore the combination of these elements does not alter their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

Suarez ('789) does not explicitly disclose publishing by the enterprise integration layer, business events in accordance with the interactions between the front-office systems and back-office systems; subscribing, by a messaging system coupled to the enterprise integration layer, to the business events published by the enterprise integration layer; and

generating, by the messaging system, for each of the subscribed business events a message that makes computing applications that are interested in the business event aware of the business event.Bownman-Amuah ('015) discloses publishing by the enterprise integration layer, business events in accordance with the interactions between the front-office systems and back-office systems; subscribing, by a messaging system coupled to the enterprise integration layer, to the business events published by the enterprise integration layer; and

generating, by the messaging system, for each of the subscribed business events a message that makes computing applications that are interested in the business event

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aware of the business event. (Column 76, line 21 discussion of “object messaging, including CORBA and Dcom implementations) It would be obvious to one having ordinary skill in the art at the time of the invention to combine Suarez ('789)'s method with Bownman-Amuah ('015)'s teaching in order to create an abstraction layer that encapsulates differences between objects and allows interaction via common interface; furthermore the combination of these elements does not alter their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention..

The claimed feature of “automatically publishing, generating etc...” merely automates procedures that have been well established in the area of business software, it is the examiners position that that automation of a process does not establish novelty (*In re Venner*, 120 USPQ 192,194)

7. Claims 45 and 47 are not patentably distinct from claim 43 and are rejected for at least the same reasons. Examiner notes that in regards to claim 47 Suarez discloses a description of an “event Service at Column 21, line 35 that discloses how a process is triggered in response to a event (i.e. milestone).

As per claim 44,

8. Suarez ('789) discloses the method of claim 43, further comprising:
defining and storing rules in a rules engine within the enterprise integration layer, the rules including rules regarding when to automatically publish the business events in accordance with the interactions, (Figure 6)

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Suarez ('789) does not explicitly disclose rules regarding the transforming of the accessed objects of the enterprise object model to the format of the back-office systems, and rules regarding mapping each of the back-office systems to an appropriate adaptor in the set of adaptors, wherein the business events are automatically published in accordance with the interactions and the rules regarding when to automatically publish the business events.

Hejlsberg et al. ('239) discloses rules regarding the transforming of the accessed objects of the enterprise object model to the format of the back-office systems, and rules regarding mapping each of the back-office systems to an appropriate adaptor in the set of adaptors, wherein the business events are automatically published in accordance with the interactions and the rules regarding when to automatically publish the business events. (Column 5, line 60 – column 6 line 44), It would be obvious to one having ordinary skill in the art at the time of the invention to combine Suarez ('789)'s method with Hejlsberg et al. ('239)'s teaching in order allow distributed processes to be deployed over non-homogenous networks.

Examiner notes that the language “rules regarding when to publish etc....” is representative of non-functional descriptive information and it has been held such information will not distinguish a claimed device from the prior art (*In re Gulack*, 217 USPQ 401 (Fed. Cir. 1983), *In re Ngai*, 70 USPQ2d (Fed. Cir. 2004), *In re Lowry*, 32 USPQ2d 1031 (Fed. Cir. 1994); MPEP 2106.01).

9. As per claim 46,

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Suarez ('789) discloses the method of claim 43, further comprising:

holding, in a metadata repository within the enterprise integration layer, metadata supplied by the set of adaptors(Column 13, lines 39-67)

- i. Suarez ('789) does not explicitly disclose enables the transforming of the accessed objects of the enterprise object model to the format of the back- office systems. Hejlsberg et al. ('239) discloses enables the transforming of the accessed objects of the enterprise object model to the format of the back- office systems. (Column 5, line 60 – column 6 line 44), It would be obvious to one having ordinary skill in the art at the time of the invention to combine Suarez ('789)'s method with Hejlsberg et al. ('239)'s teaching in order allow distributed processes to be deployed over non-homogenous networks. Applicant(s) are reminded that optional or conditional elements do not narrow the claims because they can always be omitted. See e.g. MPEP §2106 II C: "Language that suggest or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation. [Emphasis in original.] " As a matter of linguistic precision, optional elements do not narrow the claim because they can always be omitted.

10. As per claim 48,

Suarez ('789) discloses the method of claim 43 wherein implementing data functions and service methods associated with the accessed objects further comprises:

performing one or more of object assembly, object disassembly, and service invocation functions, wherein performing object assembly includes creating a composite object by

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aggregating data from a plurality of the back-office systems, performing object disassembly includes breaking a composite object into multiple objects for storage in at least one of the back-office systems, and performing service invocation includes determining which functions to invoke on one or more of the back-office systems.(Column 19, lines 11-46)

11. As per claim 49,

Suarez ('789) discloses the method of claim 43, wherein one of the business events occurs upon the implementation of the data functions and the service methods associated with the access objects, including one or more of creating data, reading data, updating data, deleting data, and invoking one of the service methods. (column 12, lines 47-64, Figure 6)

12. As per claim 50,

Suarez ('789) discloses the method of claim 43, wherein the automatic generation of the message for each subscribed business event further comprises:
mapping, by one or more adaptors of a transformation layer of the messaging system, data corresponding to the business events published by the enterprise integration layer between a format of a source of the business events and a format of the computing applications. (Figure 6)

13. As per claim 51,

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Suarez ('789) discloses the method of claim 50,

Suarez ('789) does not explicitly transforming, by a source application adaptor of the one or more adaptors, data related to a business event from a format of a source of the business event to a standard data format; and

transforming, by a target application adaptor of the one or more adaptors, data from the standard data format to a format of a target subscribed to the business event.

Hejlsberg et al. ('239) discloses transforming, by a source application adaptor of the one or more adaptors, data related to a business event from a format of a source of the business event to a standard data format; and

transforming, by a target application adaptor of the one or more adaptors, data from the standard data format to a format of a target subscribed to the business event.

(Column 5, line 60 – column 6 line 44), It would be obvious to one having ordinary skill in the art at the time of the invention to combine Suarez ('789)'s method with Hejlsberg et al. ('239)'s teaching in order allow distributed processes to be deployed over non-homogenous networks.

14. Claims 52-78 are not patentably distinct from the above rejected claims and are rejected for at least the same reasons.

(10) Response to Argument

The Appellant states that claims 43-78 were wrongly rejected because claims 43-78 are directed to statutory subject matter.

The Examiner states that this rejection is withdrawn.

The Appellant states that claims 43-78 were wrongly rejected because Suarez in view of Hejlsberg and Bowman-Amuah does not teach or suggest automatically publishing business events in accordance with the interactions between the front-office systems and the back-office systems; "publishing," as used in the claims of the pending application, is not equivalent to "point-to-point" communication as alleged by the Final Office Action, but rather is a broadcast of the relevant information to multiple subscribers. Therefore, the portion of Suarez cited by the Final Office Action showing a "point-to-point" communication is not "publishing."

The Examiner responds that Surez discloses “ The Event service provides the ability to create, update, publish and subscribe to global or system defined events. The present system is constantly monitoring its environment and reacting accordingly. This is a powerful feature which allows agents, services and users to define reactions to certain events. For example, suppose that a marketing department wishes to be informed when a project has moved into the beta-testing phase. This request can be specified to the appropriate agent and service so that when the project changes to "beta-testing" mode, an electronic mail will be sent to the department making the request. These event services provides a means of describing behavior in the form of events-conditions-actions (ECAs). ECAs describe system recognized events that trigger the present system to determine if a particular event is of interest.” Column 21, lines 36-51. The Examiner submits that at least the feature of “sending an email to a department” is analogous to the claimed feature of “publishing a business event.

The Appellant states that claims 43-78 were wrongly rejected because Bowman-Amuah does not teach or suggest publishing business events in accordance with the interactions between the front-office systems and the back-office systems, none of the applied art teach or suggest the limitation, " automatically publishing, by the enterprise integration layer, business events in accordance with the interactions between the front-office systems and back- office systems."

The Examiner responds that the limitation of "publishing is disclosed by Suarez as disclosed above, the Examiner submits that the Applicant claim feature of "front end system" and "back end system" is embodied merely as a client and server where the server comprises a data access system and the client is an application that uses the data (Applicants specification filed July 14, 2003 paragraph 19). The Examiner further submits that the Applicants claimed feature of an "integration layer is merely a series of messages exchanged between the client and the server in order to synchronize "events". The Examiner contends that this process is disclosed by Suarez " Once a computer host is selected, the initialization of the system begins by defining all known participants, hosts, services, agents, workflows, and other objects that are to be included in the distributed computing system. In addition, these and other participants, hosts, services, agents, and objects can be subsequently added to the system, removed from the system, or otherwise modified within the present system. Once configured, the functional operation of the present system is described as essentially including three basic processes. The basic processes include (1) invoking agents and launching the associated services; (2) cooperatively performing prescribed tasks through the sending and receiving of electronic

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messages between services via their associated agents; and (3) detaching agents and the associated services from the system. The prescribed tasks can be defined, for example as a workflow or can be defined and developed by individual participants as the need arises.” Column 30, lines 50-67. The Examiner submits that the disclosed process of agents exchanging messages is analogous to the claimed feature of “automatically publishing, by the enterprise integration layer, business events in accordance with the interactions between the front-office systems and back-office systems” and therefore a prima facie case of rejection has been established.

The Appellant states that claims 43-78 were wrongly rejected because Suarez in view of Hejlsberg and Bowman-Amuah does not provide any teaching or suggestion of a messaging system that automatically subscribes to the business events published by the enterprise integration layer.

The Examiner states that the arguments as stated above disclose a messaging system that automatically subscribes to the business events published by the enterprise integration layer.

The Appellant states that claims 43-78 were wrongly rejected because Suarez teaches away from the combination with Bowman-Amuah, rather than using a client-server architecture for a distributed computer environment, Suarez discloses using agents.

Applicant submits that one skilled in the art at the time of the invention would clearly recognize that these are two mutually exclusive distributed computer environment architectures.

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The Examiner states that a client server architecture and the use of agents are not mutually exclusive because they are different classes of processes. The Examiner submits that one skilled in the art at the time of the invention would clearly recognize the client server architecture would invoke agents as a messaging system between the client and server (as disclosed by Suarez [Abstract]). The Examiner notes that the Applicants invention is directed towards a client-server system. (Applicants specification filed July 14, 2003 paragraph 19). In response to Applicant's argument that there is no suggestion to combine the references, the Examiner recognizes that references cannot be arbitrarily combined and that there must be some reason why one skilled in the art would be motivated to make the proposed combination of primary and secondary references. In re Nomiya, 184 USPQ 607 (CCPA 1975). However, there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. In re McLaughlin, 170 USPQ 209 (CCPA 1971). references are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. In re Bozek, 163 USPQ 545 (CCPA) 1969. In this case, the prior art is directed towards a business system infrastructure.

The Appellant states that claims 43-78 were wrongly rejected because the combination of Suarez with Bowman-Amuah would change the principle of operation of Suarez.

The Examiner states that the combination of Suarez with Bowman-Amuah does not change the principle of operation of Suarez as discussed above.

The Appellant states that claims 43-78 were wrongly rejected because Suarez in view of Hejlsberg and Bowman-Amuah does not teach or suggest defining an enterprise object model which defines objects that model the data and services provided by the back-office systems.

The Examiner contends that defining an enterprise object model which defines objects that model the data and services provided by the back-office systems is disclosed by Suarez " Once a computer host is selected, the initialization of the system begins by defining all known participants, hosts, services, agents, workflows, and other objects that are to be included in the distributed computing system. In addition, these and other participants, hosts, services, agents, and objects can be subsequently added to the system, removed from the system, or otherwise modified within the present system. Once configured, the functional operation of the present system is described as essentially including three basic processes. The basic processes include (1) invoking agents and launching the associated services; (2) cooperatively performing prescribed tasks through the sending and receiving of electronic messages between services via their associated agents; and (3) detaching agents and the associated services from the system. The prescribed tasks can be defined, for example as a workflow or can be defined and developed by individual participants as the need arises." Column 30, lines 50-67, also figure 11 and 16

The Appellant states that Claims 43-78 were wrongly rejected because Suarez in view of Hejlsberg and Bowman-Amuah does not teach or suggest implementing, with a business object server of the enterprise integration layer coupled to the client access

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interfaces, data functions and service methods associated with the accessed objects that enable the interactions between the front-office systems and back-office systems.

The Examiner states that the arguments as stated above disclose implementing, with a business object server of the enterprise integration layer coupled to the client access interfaces, data functions and service methods associated with the accessed objects that enable the interactions between the front-office systems and back-office systems.

The Appellant states that claims 43-78 were wrongly rejected because none of the limitations are optional, and conditional is not equivalent to optional.

The Examiner responds that the language of claim 43 "accessed objects that enable the interactions" is not a positive claim limitation, the mere enablement of a process does not distinguish over the prior art record. Applicant(s) are reminded that optional or conditional elements do not narrow the claims because they can always be omitted. See e.g. MPEP §2106 II C: "Language that suggest or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation. [Emphasis in original.] " As a matter of linguistic precision, optional elements do not narrow the claim because they can always be omitted.

The Appellant states that claims 56, 57, 59-61, 64, 66, 67, 69-71, and 73 were wrongly rejected because claim elements were not addressed by the Final Office Action.

The Appellant states that claims 56 and 66 include the limitation of "providing distributed transactional quality of service through a transaction processor within the enterprise integration layer."

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The Examiner responds that this feature is disclosed by Bowman-Amuah at Column 54, lines 19-26.

The Appellant states that claims 57 and 67 include the limitation of "making data persistent within a local data store of the enterprise integration layer."

The Examiner responds that this feature is disclosed by Hejlsberg at Column 5, lines 61-column 6, line 7.

The Appellant states that claims 59 and 69 include the limitation of "using previously existing infrastructure services within the enterprise for the enterprise integration layer."

The Examiner responds that this feature is disclosed by Hejlsberg at Column 5, lines 61-column 6, line 7.

The Appellant states that claims 60 and 70 include the limitation that "the previously existing infrastructure services are selected from a group of services consisting of a naming and directory service, a security service, and an application management and monitoring system."

The Examiner responds that this feature is disclosed by Hejlsberg at Column 5, lines 61-column 6, line 7.

The Appellant states that claims 61 and 71 include the limitation that "the previously existing infrastructure services include each of a group of service comprising a naming

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and directory service, a security service, and an application management and monitoring system."

The Examiner responds that this feature is disclosed by Hejlsberg at Column 5, lines 61-column 6, line 7.

The Appellant states that claim 64 includes the limitation of "rules regarding the transforming of the accessed common format descriptions of the data and the services into the format of the back-office systems, and rules regarding mapping each of the back-office systems to an appropriate adaptor in the set of adaptors."

The Examiner responds that this feature is disclosed by Bowman-Amuah at Column 120 line31 discussion of Application logic.

The Appellant states that claim 73 includes the limitation that "the at least one of the business events and the transformed data related to the at least one of the business events are combined in a single packet and published by the messaging interface of the messaging system or are independently published by the messaging interface of the messaging system."

The Examiner responds that this feature is disclosed by Suarez at Column 21, line 15 discussion of Queue service.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

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Respectfully submitted,

JMW

/John Winter /

/Calvin L Hewitt II/

Supervisory Patent Examiner, Art Unit 3685

Conferees:

Calvin Hewitt /C.L.H./

Vincent Millin,/vm/

Appeals Practice Specialist